

WHAT IS CLAIMED IS:

1. A liquid crystal display apparatus comprising:
a light conductor plate;

a light source arranged on a side surface of the light conductor plate so as to light a liquid crystal cell arranged on a front surface side of the light conductor plate from a back surface side thereof; and

said light conductor plate having an incident surface for a light from the light source, a light emitting surface for emitting the input light to the liquid crystal cell, and a plurality of dots constituted by small projecting portions or small recess portions for changing a moving direction of the light from the incidence surface toward a direction of the light emitting surface, said dots being formed in the light emitting surface and a surface of the light conductor plate opposite to the light emitting surface with each of said dots having a height or depth within a range of 2 to 100 μm .

2. A liquid crystal display apparatus comprising:
a light conductor plate;

a light source arranged on a side surface of the light conductor plate so as to light a liquid crystal cell arranged on a front surface side of the light conductor plate from a back surface side thereof; and

said light conductor plate having an incident surface for a light from the light source, a light emitting surface

for emitting the input light to the liquid crystal cell, and a plurality of dots constituted by small projecting portions or small recess portions for changing a moving direction of the light from the incidence surface toward a direction of the light emitting surface, said dots being formed in a surface of the light conductor plate opposite to the light emitting surface with each of said dots having a height or depth within a range of 2 to 100 μm .

3. A liquid crystal display apparatus comprising:
a light conductor plate;

a light source arranged on a side surface of the light conductor plate so as to light a liquid crystal cell arranged on a front surface side of the light conductor plate from a back surface side thereof; and

said light conductor plate having an incident surface for a light from the light source, a light emitting surface for emitting the input light to the liquid crystal cell, and a plurality of dots constituted by small projecting portions or small recess portions for changing a moving direction of the light from the incidence surface toward a direction of the light emitting surface, said dots being formed in the light emitting surface of the light conductor plate with each of said dots having a height or depth within a range of 2 to 100 μm .

4. The apparatus according to claim 1, wherein each of said dots has an area within a range of 0.2 to 0.000025

square mm, and an angle of inclination of a cross section of the dot is within a range of 7 to 43 degrees.

5. The apparatus according to claim 2, wherein each of said dots has an area within a range of 0.2 to 0.000025 square mm, and an angle of inclination of a cross section of the dot is within a range of 7 to 43 degrees.

6. The apparatus according to claim 3, wherein each of said dots has an area within a range of 0.2 to 0.000025 square mm, and an angle of inclination of a cross section of the dot is within a range of 7 to 43 degrees.

7. A liquid crystal display apparatus comprising:
a light conductor plate;

a light source arranged on a side surface of the light conductor plate so as to light a liquid crystal cell arranged on a front surface side of the light conductor plate from a back surface side thereof; and

said light conductor plate having an incident surface for a light from the light source, a light emitting surface for emitting the input light to the liquid crystal cell, and a plurality of dots constituted by small projecting portions or small recess portions for changing a moving direction of the light from the incidence surface toward a direction of the light emitting surface, said dots being formed in at least one of the light emitting surface and a surface of the light conductor plate opposite to the light

emitting surface, each of said dots having an area within a range of 0.2 to 0.000025 square mm, an angle of inclination of a cross section thereof within a range of 50 to 85 degrees and a height or depth within a range of 5 to 40 μm .